



DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service

Food and Drug Administration
10903 New Hampshire Avenue
Document Control Center – WO66-G609
Silver Spring, MD 20993-0002

NuVasive, Incorporated
Ms. Cynthia Adams
Regulatory Affairs Associate
7475 Lusk Boulevard
San Diego, California 92121

November 25, 2014

Re: K142299

Trade/Device Name: NuVasive® CoRoent® Small Interlock™ System
Regulation Number: 21 CFR 888.3080
Regulation Name: Intervertebral body fusion device
Regulatory Class: Class II
Product Code: OVE
Dated: October 31, 2014
Received: November 3, 2014

Dear Ms. Adams:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration. Please note: CDRH does not evaluate information related to contract liability warranties. We remind you, however, that device labeling must be truthful and not misleading.

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the Federal Register.

Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); medical device reporting (reporting of medical device-related adverse events) (21 CFR 803); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please contact the Division of Industry and Consumer Education at its toll-free number (800) 638-2041 or (301) 796-7100 or at its Internet address

<http://www.fda.gov/MedicalDevices/ResourcesforYou/Industry/default.htm>. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21CFR Part 807.97). For questions regarding the reporting of adverse events under the MDR regulation (21 CFR Part 803), please go to

<http://www.fda.gov/MedicalDevices/Safety/ReportaProblem/default.htm> for the CDRH's Office of Surveillance and Biometrics/Division of Postmarket Surveillance.

You may obtain other general information on your responsibilities under the Act from the Division of Industry and Consumer Education at its toll-free number (800) 638-2041 or (301) 796-7100 or at its Internet address

<http://www.fda.gov/MedicalDevices/ResourcesforYou/Industry/default.htm>.

Sincerely yours,

Mark N. Melkerson -S

Mark N. Melkerson
Director
Division of Orthopedic Devices
Office of Device Evaluation
Center for Devices and
Radiological Health

Enclosure

Indications for Use

Form Approved: OMB No. 0910-0120

Expiration Date: January 31, 2017

See PRA Statement below.

510(k) Number (if known)

K142299

Device Name

NuVasive® CoRoent® Small InterlockTM System

Indications for Use (Describe)

The CoRoent® Small Interlock System is a stand-alone anterior cervical interbody fusion system indicated for use in skeletally mature patients with cervical disc disease (DDD) at one level from C2-T1. The CoRoent Small Interlock System is intended for use with autogenous and/or allogeneic bone graft comprised of cancellous, cortical, and/or corticocancellous bone graft to facilitate fusion. The cervical devices are to be used in patients who have had at least six weeks of non-operative treatment.

Type of Use (Select one or both, as applicable)

Prescription Use (Part 21 CFR 801 Subpart D) Over-The-Counter Use (21 CFR 801 Subpart C)

PLEASE DO NOT WRITE BELOW THIS LINE – CONTINUE ON A SEPARATE PAGE IF NEEDED.

FOR FDA USE ONLY

Concurrence of Center for Devices and Radiological Health (CDRH) (Signature)

This section applies only to requirements of the Paperwork Reduction Act of 1995.

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510(k) Summary

In accordance with Title 21 of the Code of Federal Regulations, Part 807, and in particular 21 CFR §807.92, the following summary of information is provided:

A. Submitted by:

Cynthia Adams
Senior Regulatory Affairs Associate
NuVasive, Incorporated
7475 Lusk Blvd.
San Diego, California 92121
Telephone: (858) 909-1800

Date Prepared: November 21, 2014

B. Device Name

Trade or Proprietary Name: *NuVasive® CoRoent® Small Interlock™ System*
Common or Usual Name: Intervertebral Body Fusion Device
Classification Name: Intervertebral Body Fusion Device

Device Class: Class II
Classification: 21 CFR § 888.3080
Product Code: OVE

C. Predicate Devices

The subject *CoRoent Small Interlock System* is substantially equivalent to multiple predicate devices. *NuVasive CoRoent Small Interbody System* (K140921) serves as the primary predicate device, while *NuVasive CoRoent Small Interlock System* (K102547) is an additional predicate device. *SeaSpine Inc. Zuma-C* (K092521) and *Zimmer Spine Optio-C Anterior Cervical System* (K132894) are reference predicate devices.

D. Device Description

The NuVasive *CoRoent Small Interlock System* is a standalone anterior cervical interbody device consisting of a PEEK (polyetheretherketone) implant cage with titanium alloy and tantalum radiographic markers, titanium alloy washers, and three (3) titanium alloy bone fixation screws. The devices are manufactured from PEEK-Optima® LT-1 conforming to ASTM F2026, titanium alloy conforming to ASTM F136, and tantalum conforming to ASTM F560. The implants are available in a variety of sizes to accommodate anatomical conditions. The *CoRoent Small Interlock System* is a standalone system intended to be used with the bone screws provided, and when used as such requires no additional supplementary fixation systems.

E. Indications for Use

The CoRoent Small Interlock System is a standalone anterior cervical interbody fusion system indicated for use in skeletally mature patients with cervical disc disease (DDD) at one level from C2-T1. The System is intended to be used with with autogenous or allogeneic bone graft comprised of cancellous, cortical, and/or corticocancellous bone graft to facilitate fusion. The cervical devices are to be used in patients who have had at least six weeks of non-operative treatment.

F. Technological Characteristics

As was established in this submission, the subject *CoRoent Small Interlock System* is substantially equivalent to other predicate devices cleared by the FDA for commercial distribution in the United States. The subject device was shown to be substantially equivalent and have the same technological characteristics to its predicate devices through comparison in areas including design, intended use, material composition, and function. This device does not contain software or electrical equipment.

G. Performance Data

A systemic literature analysis of published clinical data for cervical interbody fusion devices similar to the *CoRoent Small Interlock System* was provided as performance data to support the expanded Indications for Use. For treatment of cervical degenerative pathologies in anterior cervical interbody fusion surgical procedures, the published clinical outcomes demonstrate that the use of allogeneic cancellous, cortical and/or corticocancellous bone graft with the subject device poses no new risks to patients.

Additionally, Finite Element Analysis and comparative methods were used to demonstrate that the subject *CoRoent Small Interlock System* is substantially equivalent to *CoRoent Small Interlock System* (K102547). The additional implant offerings of the *CoRoent Small Interlock System* do not present a new worst-case; therefore, mechanical testing submitted and cleared through the *CoRoent Small Interlock System* (K102547) may be adopted for the subject device.

H. Conclusions

Based on the indications for use, technological characteristics, and comparison to predicate devices, the subject *CoRoent Small Interlock System* has been shown to be substantially equivalent to legally marketed predicate devices.